

**ABOUT PUNJAB**

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# FACTS ABOUT PUNJAB

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# FACTS ABOUT PUNJAB

## AREA AND EXTENT

Punjab is one of the new North-West territories of India which came into existence as a result of the partition of India in August, 1947. It is bound on the west by the Punjab (Pakistan) and Bahawalpur States; on the North by Kashmir, a block of Himachal Pradesh and Tibet and on the East by the river Jumna. On its southern border it encroaches upon Rajasthan. According to survey of India, it has a total area of 36,391 square miles lying between  $27\frac{1}{2}^{\circ}$  and  $34^{\circ}$  North.

## POLITICAL DIVISIONS

The present Punjab State includes Jullundur and Ambala Divisions comprising 13 districts as compared to 29 in the old undivided Punjab. There are 54 tehsils, 130 towns and 15,147 villages in the State. In pursuance of the policy of Decentralisation of Administration, however, the State is being split up by and by into sub-divisions under the control of sub-divisional officers. Twenty-one such Sub-Divisions have already come into existence.

## PHYSICAL FEATURES

Physically, the State is divided into three natural divisions, namely the Himalayan, the sub-Himalayan and the Indo-Gangetic plain. The Himalayan Division includes Simla and

Kangra districts, i. e., the country lying on the sides of outer ranges of the Himalayas, whereas the Sub-Himalayan Division is the narrow strip of the country adjoining the Himalaya called sub-mountain into which run some of the spurs of Himalayas such as the Shwaliks and the high hills of Kasauli and Dalhousie. It is in the Sub-Himalayan region that the Ambala, Hoshiarpur and Gurdaspur Districts lie. The third region is the Indo-Gangetic Plain comprising the remaining seven districts, viz., Hissar, Rohtak, Gurgaon, Karnal, Jullundur, Ludhiana, Amritsar and Ferozepore.

### RAINFALL

There are two well-marked seasons of rainfall in the Punjab State : (i) the monsoon period lasting from the middle of June till September on which the autumn crops and spring sowing depend and (ii) the winter rains which fall early in January and although often insignificant in amount, it materially affects the prosperity of spring harvest. Since monsoon gets exhausted in its passage over the great plains of Sindh and Rajasthan while west winds from Baluchistan pass over arid tracts and leave such moisture, as they have collected on the western slopes of Suleiman range, Punjab has to depend on its rainfall very largely on the south winds from the Bay of Bengal. According to rainfall, the State can be divided into three main natural divisions in each of which the general meteorological conditions are believed to be fairly homogeneous. These are the mountains (stations like Simla, Dalhousie, and Dharmasala) the sub-mountains



(Hoshiarpur, Pathankot etc.) and the Plains. The normal average rainfall of each district is given below—

|            |    |        |
|------------|----|--------|
| Kangra     | .. | 116·77 |
| Simla      | .. | 62·11  |
| Hoshiarpur | .. | 34·28  |
| Gurdaspur  | .. | 33·74  |
| Ambala     | .. | 30·81  |
| Ferozepore | .. | 16·94  |
| Hissar     | .. | 15·90  |
| Jullundur  | .. | 26·11  |
| Ludhiana   | .. | 25·48  |
| Gurgaon    | .. | 24·47  |
| Amritsar   | .. | 23·10  |
| Rohtak     | .. | 19·83  |
| Karnal     |    | 29·06  |

### RIVERS

There are only three principal snow-fed rivers which came to the share of this State as a result of the division of Punjab. They are the Satluj, the Beas and a part of the Ravi. These rivers, however, neither give access to the sea nor they are navigable even for medium-sized crafts. In the early parts of their course which is amidst snow-clad ranges, they do not serve any purpose except that at Joginder Nagar in Kangra District waters of the river Uhl, a tributary of the Beas, which joins the latter in the Mandi District of Himachal Pradesh are utilised to produce 48,000 kws. of electric power. In the plains too, even upto the partition, these rivers were not put to much use for the benefit of eastern part of Punjab. Out of a total net work of 22,258 miles of canals

and distributaries which irrigated 11,262,236 acres of land in the United Punjab, only 5,357 miles of canals and distributaries irrigated 3,005,493 acres were in East Punjab. With the dawn of Independence, however, a huge and splendid system of canals is being spread out in the entire State. Dams are being thrown across these rivers and their waters are being harnessed for irrigation and generation of electricity.

### MINERALS

Punjab has very little mineral wealth nor is it fully developed. It has no coal, no petroleum, lime-stone and concrete are found near Pathankot and Kalka and also in Ambala District. Slate is found near Dharamsala and Rewari. Iron is found in Kangra District at several points along the Dhauladhar in the form of crystals of magnetic oxide of iron. Although the supply of ore is inexhaustible and its quality is equal to the best Swedish iron, the remoteness of the tract combined with difficulties of carriage and absence of fuel, have hitherto prevented smelting on a large scale. Besides iron, antimony ore is also found.

Copper was formerly smelted in considerable quantities in various parts of the outer Himalayas in Kulu, and copper pyrites are found in the lower Himalaya in Kulu and in Simla Hills. Slate is found at Slingri in Lahaul.

### POPULATION

The total population of Punjab according to 1951 census is 1,26,41,205 persons (6,786,934 men and 5,854,271 women) of whom only



24,00,932 (i.e., 19·01 per cent of the total population) are residing in the towns and the remaining 80·99 per cent in the villages. Its density of population works out to 347·4 persons per square mile as against 286·8 in the United Punjab.

In the villages 80 per cent of the people are engaged in agricultural professions whereas in the urban areas 91 per cent of the population follows non-agricultural occupations. In the State as a whole the percentage of agricultural classes stands at 65·5. The percentage of persons who follow agricultural occupations in the various districts is given below:—

| Name of districts | Total population | Percentage of total population engaged in agricultural professions |
|-------------------|------------------|--|
| 1. Kangra         | 936,042          | 82·39  |
| 2. Hissar         | 1,045,645        | 75·91  |
| 3. Ferozepore     | 1,326,520        | 73·89  |
| 4. Gurgaon        | 967,664          | 68·49  |
| 5. Hoshiarpur     | 1,091,986        | 67·53  |
| 6. Karnal         | 1,079,379        | 65·80  |
| 7. Rohtak         | 1,122,046        | 65·57  |
| 8. Gurdaspur      | 851,294          | 61·36  |
| 9. Amritsar       | 1,367,040        | 55·74  |
| 10. Ludhiana      | 808,105          | 53·68  |
| 11. Ambala        | 943,734          | 51·75  |
| 12. Jullundur     | 1,055,600        | 49·27  |
| 13. Simla         | 46,150           | 1·14   |

According to census of 1951, the total number of literates in the State is 2,038,699 of which 1,490,713 are men and 547,986 are women. The percentage of literates to the total population thus works out to be 16·13 (21·95 for men and 9·36 women).

### THE STATE LEGISLATURE

There are two Houses of the State Legislature in Punjab, viz., the Vidhan Sabha and the Legislative Council. In the present Vidhan Sabha there are 126 members (including 21 scheduled castes) whereas the Legislative Council has only 40 members of whom 8 are nominees of the Governor, 13 each as representatives of the members of the Vidhan Sabha and the local bodies and 3 each elected from Graduates and Teachers' constituencies. The number of seats in the Vidhan Sabha will, however, be reduced to 119 under the recommendations of the Delimitation Commission of India.

The number of seats allocated to the Punjab in the House of People is 18 of which three are reserved for scheduled castes.

### LAND AND AGRICULTURE

The total area of the State according to village records of 1953-54 is 239 lac acres of which 123 lacs acres (i.e. 51·29 per cent of the total) represent net area sown, 17·3 lacs as current fallows, 18·5 lacs as cultivable waste other than current fallows and 7·8 lacs acres as forests. The remaining area of 72·85 lacs is such as was not available for cultivation during that year.



In 1953-54, the total irrigated area sown was 60·19 lac acres in Punjab as against 44·33 lac acres in 1947-48. The corresponding figures for unirrigated area for the years 1953-54 and 1947-48 stood at 80·2 lac and 94·44 lac respectively.

In the matter of food production, the Punjab is the second largest wheat and gram area in the Union, third is barley and maize, fourth is bajra and sugarcane, while it produces considerable quantities of jowar, cotton, rice, rape and mustard and small quantities of tea, tobacco, groundnut and linseed among other things.

After the attainment of Independence there has been a rapid increase in the production of foodgrains, cotton, raw sugar and oil seeds. The production of major foodgrains which amounted to 24 lac tons in 1950-51 has risen to 37·9 lac tons while that of cotton has gone upto 4·4 lac bales registering thereby an increase of 300 per cent. In terms of money it can be said that Punjab has become richer by Rs 35 crores in a year on account of increased production of foodgrains and cotton alone. The production of paddy which was 2·5 lac tons in 1950-51 rose to 3·6 lac tons in 1953-54, while increase in the case of oilseeds in the last four years has been 55 per cent. All this has been the result of an all-out general effort in covering almost all aspects of agricultural activity such as more provision of irrigation facilities, reclamation of waste lands, application of compost and fertilizers, distribution of improved seeds and implements, control of insect pests and diseases and consolidation of agricultural holdings, etc. etc.



## IRRIGATION

The Punjab after partition came to inherit large tracts of unirrigated areas. Out of a total of over 140 lac acres of canal irrigated area in the United Punjab, only 30 lac. acres, i.e., about 21 per cent came to its lot. Vigorous efforts, had, therefore, to be made to fill the gap created by partition and commendable results have been achieved in extending more and more irrigation facilities. In addition to the major Bhakra-Nangal Project, which consists of 690 miles of main canals and branches and 2,200 miles of distributaries and would provide irrigation to 38 lac acres more in Punjab, several minor irrigation schemes and tube-wells schemes also came to be undertaken some of which have already been completed. It is anticipated that all these schemes will increase irrigation of cultivable area of 54,61,500 acres in 1947-48 to about 76 lakh acres by the end of 1960-61. Thus out of the total area of 160 lakh acres in the State, the irrigated area will be 47.5 per cent of the cultivable area.

## ELECTRICITY

Extension of electric supply in the State particularly in the rural areas is one of the major objectives of the State policy and substantial achievement has been made in this respect. By the end of the year 1955-56 electricity has been made available to 30 per cent of the total population of the State of which the rural population forms 10 to 12 per cent. The following table will show

the extent to which electrification has been done in this State.

---

| Localities   | Total number of localities | Extent of electrification  |
|--|----------------------------|--|
| <hr/>  |                            |  |
| 1. Towns and villages with a population of 20,000 or above.        | 30                         | All electrified.   |
| 2. Towns and villages with a population between 10,000 and 20,000. | 31                         | Majority stands electrified. The remaining will be electrified by 1956-57.                   |
| 3. Towns and villages with a population below 10,000               | 15,216                     | 1,000 stand electrified. Another 4,000 will be electrified during the second Five Year Plan. |

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The per capita annual consumption of electricity in the Punjab at present is 10 kws. but it is estimated to rise to 50 kws. by the end of the Second Five-Year Plan.

### INDUSTRIES

The total number of registered factories in the State was only 600 in 1947 but now it has risen to above 2,000. Amongst the important industrial centres Jullundur has become famous for producing sports goods while Batala and Ludhiana are well-known for light



engineering works, and Amritsar for textile goods. Sonapat has become well-known for Atlas cycle factory which is one of the largest of its kind in the country. The other large scale industries include one woollen mill at Dhariwal ; 3 cotton mills, one at Amritsar and two at Bhiwani, one New Cotton Spinning Mill with 25,000 spindles is under construction at Hissar one sugar factory at Abdullapur producing 16,000 tons of sugar ; one Banaspati ghee factory at Abdullapur with an annual production of 3,000 tons of ghee and one paper factory at Jamuna Nagar with a production of 15,000 tons of paper. There are also two embroidery mills and a number of lace-making factories in the State. One footwear factory at Faridabad, four assembling-cum-cycle manufacturing units at Sonapat, Faridabad and Ludhiana are also worth mentioning.

The important small scale industries are: scientific instruments, glass wares, wooden planks and shooks ; foundry and engineeing, re-rolling mills, cotton ginning and handloom and power-looms and cloth weaving.

In the hosiery industry, with 803 concerns out of a total of 873 concerns in India, Punjab occupies a premier-most position in the whole of the country. Blankets, rugs, cycle parts, utensil making, tanning and wood industries, silk spinning and weaving, pottery are amongst the principal cottage industries in the State.

Punjab ranks next to Bombay in the production of artificial silk. 350 units are at present



working in the State. It is contemplated to also start an Art Silk Weaving Factory soon.

There are 51,000 handlooms in the Punjab. To promote sale of goods, the State Industries Department have set up sales depots at 14 important places in the State, besides one Cottage Industries Museum and Emporium at Chandigarh.

The State Industries Department is also running 13 Work Centres, 16 Vocational Training Centres and one Cotton and Wool Spinning and Weaving Centres for the benefit of displaced persons.

The Punjab has 24 industrial schools for men and 13 for women in Punjab. Of these 27 (19 men and 8 for women) are run exclusively by the State Government and the remaining 10 are private institution .

## ROADS

As already stated Punjab has a gross area of 37,378 square miles with a population of 1.26 crores approximately but on 31st March, 1951, there were only 2,283 miles of metalled and 849 miles of unmetalled roads to serve such a vast tract. Road communication is, therefore, being given special consideration in our development plans. A sum of Rs 659 lacs is likely to be spent on this item in the First Five-Year Plan period and another sum of Rs 776 lacs during the Second Five Year-Plan period. It is expected that 1,513 miles of new metalled roads will be added to the State roads by the end of the year 1955-56.

## TRANSPORT

On 30th September, 1954, there were 10,133 registered vehicles in the State of which 2,100 were owned by the State Government.

Government Transport Services are at present operating on 65 routes with 256 vehicles. During the current year 19 more routes are proposed to be taken over. Besides bringing about large scale improvements in the Road Transport both in the public and private sectors, the scheme of nationalisation of passenger transport in the State is being carried out in a phased programme.

## HEALTH

The expenditure on health activities in the Punjab has been fast increasing. Whereas the budgeted expenditure for medical and public health was Rs. 74,08,300 and Rs. 23,90,510 in April 1952, it rose to Rs. 91,03,500 and Rs. 35,36,720 respectively, in 1954-55.

The number of hospitals and dispensaries in the State has risen to 657 in 1955-56 from 481 in 1947. The corresponding increase in the number of beds has been from 6,555 to 8,775. On the average medical aid is provided to about 59 lac persons every year in these hospitals and dispensaries.

The number of hospitals exclusively reserved for women is 31 with 1,167 beds. Besides, there are 104 maternity and child welfare centres in the State as against 63 in 1947.



Before 1951, there were only 188 beds available for T. B. patients. This number has now increased to 430 as given below :—

|   | <i>Beds</i> |
|---|-------------|
| (1) Sir Gujjarmal T. B. Sanitorium,<br>Amritsar ..                                  | 88          |
| (2) Tuberculosis Hospital at Chetru<br>(Kangra), for D. Ps. ..                      | 100         |
| (3) Gulab Devi T. B. Hospital,<br>Jullundur ..                                      | 30          |
| (4) Government T. B. Sanitorium,<br>Tanda, for Class IV Govern-<br>ment Servants .. | 200         |

There is now a T. B. clinic at every district headquarter of the State.

There are two medical colleges in the State namely, Glancy Medical College, Amritsar, and Women's Christian Medical College, Ludhiana. A Dental College at Amritsar has also started functioning.

### EDUCATION

After the attainment of Independence there has been a rapid progress in this sphere. The number of primary and basic schools in the State has gone up from 4,315 in 1950-51 to 10,000 in 1954-55 ; high schools from 429 to 704 and Arts and Science Colleges from 39 to 70. The number of students between 1951-52 and 1954-55 has risen from 6 lacs to



8 lacs in the Primary Classes and 2·64 lacs to 3·87 lacs in the secondary. With this, now, we have got a primary school in each village in the State having a Panchayat.

Promotion of education among backward classes is receiving special attention of the State Government and about Rs. 25 lacs are being spent on them annually in the form of stipends and fee concessions. There are 13 schools for the benefit of erstwhile criminal tribes and as many as 23 primary and 3 middle schools in backward areas of Lahaul and Sptti apart from a high school at Keylong.

In the Punjab, a scheme of nationalisation of text books has been enforced. Under this scheme, only nationalised text books which number 147 are being used in the classes I to VIII in all schools.

### COMMUNITY PROJECTS

There are at present 5 Community Projects, 9 Community Blocks and 16 N. E. S. Blocks in the State. The average coverage of these blocks and expenditure estimates are as follows :—

| No. of villages |     | Population | Expenditure      |
|-----------------|-----|------------|------------------|
| Project         | 300 | 2,90,000   | 65 lac of Rupees |
| Community Block | 100 | 67,000     | 15 „ „ „         |
| N.E.S. Block    | 100 | 66,000     | 7·5 „ „ „        |

The Community Development programme in the State thus covers about 25 per cent of the entire rural population of the State. According to the present schedule the remaining 3/4th of the area would be covered by 136 blocks proposed to be started during the Second Five-Year Plan period.

### FIVE-YEAR PLANS

Punjab's First Five-Year Plan (1950-51 to 1955-56) originally envisaged an expenditure of Rs 20·21 crores. This was revised subsequently and important additional items were included. The revised Plan is now of the order of Rs. 33·86 crores.

In the first four years the total expenditure of the State Plan was about Rs. 22·33 crores. A sum of about Rs. 11·53 crores has been earmarked for the current year.

In addition to the First Five-Year Plan, development expenditure amounting to Rs. 102·44 crores has been incurred on several centrally sponsored schemes, such as Bhakra-Nangal and on purely State Schemes.

Development under the Plan and outside has been mainly concentrated on agriculture. This is natural inasmuch as agriculture is the backbone of the Indian economy.

Self sufficiency in food means for us freedom from want. It means emancipation from dependence on foreign powers.

During the First Five-Year Plan 57 lac acres would have been consolidated out of a total of



159 lac acres to be consolidated. Consolidated holdings make for a planned countryside—with roads, parks, schools and panchayat ghars.

Top priority in development work has been given under the First Five-Year Plan to the Bhakra-Nangal Project which has consumed nearly 46 per cent of the total cost of development plans in First Five-Year Plan.

With the commissioning of Ganguwal Power House in January, 1955, 24,000 kws of firm electric power at 100 per cent load factor were added to our power resources. This will mean cheap electricity for industrial and agricultural purposes.

Punjab's First Five-Year Plan was essentially an integral part of the First Five-Year Plan for the country, total gross expenditure on which was expected to be about Rs 3,500 crores. As a result of this, the national income was expected to rise by nearly 15 per cent at the rate of three per cent per year.

In the second plan, the total gross outlay was expected to be about Rs. 7,000 crores and there would be an increase in the national income by five per cent a year.

There will be series of Five-Year Plans—National income which stood at Rs. 9,000 crores in the beginning of 1950-51 is expected to be doubled by the year 1978.

In formulating the Second Plan, the Punjab Government has provided for the completion



of such projects as have been started in the first Plan.

It is hoped that by 1960-61, 21 lakh acres of land will be irrigated from the canal system. This will result in enormous increase in agricultural production. The addition in foodgrains will be 6·4 lakh tons, in cotton 2·5 lakh bales, sugarcane eight lakh tons and oil seeds 14,000 tons. On the electricity side it is proposed to construct further generating units to achieve a generating capacity of 6,42,000 kws. The benefits of electricity will be extended to rural areas, covering an estimated 4,000 to 5,000 additional villages over and above the 1,000 expected to be electrified by the end of the First Plan period. Electricity will also be extended to all towns in the population group 10,000 to 20,000 which are at present unelectrified. The *per capita* consumption of electricity in the Punjab now is 10 k.w.h.; this is expected to rise to 50 k.w.h. by 1960-61.

The Second Plan provides for the construction of 1,437 miles of new roads.

The Government phase of development of the Chandigarh Capital would be completed during the Second Plan period.





## APPENDIX

## FACTS AND FIGURES ABOUT PUNJAB

|                 |                         |  |
|-----------------|-------------------------|--|
| Area            | 36,391 Sq. miles        |  |
| Population      | 1,26,41,205             | Male .. 67,86,934<br>Female .. 58,54,271<br>Urban .. 24,00,932<br>Rural .. 1,02,40,273 |
| Literacy        | .. 16.13 per cent       | { 21.95 per cent for men<br>{ 9.36 per cent for women                                  |
| Main Occupation | Agriculture 65 per cent | { 80 per cent of rural population<br>{ 9 per cent of urban population                  |

## POLITICAL FEATURES

|                          |    |        |
|--------------------------|----|--------|
| Administrative Divisions | .. | 2      |
| Districts                | .. | 13     |
| Tehsils                  | .. | 54     |
| Towns                    | .. | 130    |
| Villages                 | .. | 15,107 |

## ANIMAL HUSBANDRY

*(Livestock figures in the State)*

## 1951 Census

|                    |    |           |
|--------------------|----|-----------|
| Bulls              | .. | 5,638     |
| Bullocks           | .. | 16,32,357 |
| Cows               | .. | 12,23,386 |
| Young Stock Calves | .. | 14,31,000 |

|                   |    |           |
|-------------------|----|-----------|
| Male Buffaloes    | .. | 1,56,162  |
| Female Buffaloes  | .. | 14,34,019 |
| Buffalo Calves    | .. | 9,61,527  |
| Sheep             | .. | 6,41,093  |
| Goats             | .. | 11,55,782 |
| Horses and ponies | .. | 95,449    |
| Donkeys           | .. | 1,14,486  |
| Camels            | .. | 1,21,495  |

## FORESTS

|   |                    |
|---|--------------------|
| Total area under forest (on 31st March, 1954)     | 32,48,281 acres    |
| Resin collected in 1953-54                        | .. 83,029 maunds   |
| Timber sold in 1953                               | .. 31,13,000 c.ft. |
| Total receipt of the Forest Department in 1953-54 | Rs 48.53 lakhs.    |
| Total Expenditure in 1953-54                      | .. Rs 41.93 lakhs. |

## EDUCATION

|                                   |                      |
|-----------------------------------|----------------------|
| Primary and Basic Schools 1954-55 | 10,000 approximately |
| High Schools                      | .. 753               |
| Arts and Science Colleges         | .. 70                |

## HEALTH (1954-55)

|  |        |
|--|--------|
| Total number of Hospitals and Dispensaries.. | 621    |
| State Owned                                  | .. 238 |



|  |    |       |
|--|----|-------|
| District Board and Municipal Dispensaries<br>and Hospitals | .. | 250   |
| Subsidised   | .. | 82    |
| Private  | .. | 51    |
| Total number of Beds                                       | .. | 8,448 |
| Beds for Men   | .. | 4,920 |
| Beds for Women   | .. | 3,528 |

#### PANCHAYATS

|   |    |        |
|---|----|--------|
| Total number of Panchayats                    | .. | 9,194  |
| Total number of Panches                       | .. | 63,132 |
| Scheduled Castes and Scheduled Tribes Panches |    | 9,036  |

#### CO-OPERATIVES

|   |    |                      |
|---|----|----------------------|
| Total number of Co-operative Societies<br>(as on 30th June, 1953) | .. | 14,031               |
| Total membership  | .. | 7,01,596             |
| Working capital   | .. | Over Rs 16<br>crores |

#### CANALS

|  |    |             |
|--|----|-------------|
| Total length of main canals and branches (1954-<br>55) | .. | 2,285 miles |
| Distributaries   | .. | 8,696 miles |
| Main Canals of Bhakra System and Branches              |    | 690 miles   |
| Distributaries of Bhakra System                        | .. | 2,200 miles |

**COMMUNITY PROJECTS AND N.E. S. BLOCKS**  
**Average population coverage and expenditure**

|                        | <i>Villages</i> | <i>Population</i> |
|------------------------|-----------------|-------------------|
| <b>Project</b>         | 300             | 2,90,000          |
| <b>Community Block</b> | 100             | 67,000            |
| <b>N.E.S. Block</b>    | 100             | 66,000            |

**BHAKRA-NANGAL PROJECT**  
*Bhakra Dam*

|   |               |
|---|---------------|
| <b>Height</b>   | .. 680 feet   |
| <b>Length at bottom</b>                                       | .. 325 feet   |
| <b>Width at top</b>   | .. 30 feet    |
| <b>Length at top</b>  | .. 1,700 feet |
| <b>Width of dam at bottom including apron</b>                 | .. 670 feet   |
| <b>Width at bottom including apron and heel<br/>claystone</b> | .. 1,310 feet |

*Diversion Tunnels*

|                                      |                           |
|--------------------------------------|---------------------------|
| <b>No. of Diversion Tunnels</b>      | .. Two                    |
| <b>Length of Diversion Tunnels</b>   | .. About half a mile each |
| <b>Diameter of Diversion Tunnels</b> | .. 50 feet                |

*Coffer Dams*

|  |             |
|--|-------------|
| <b>Height of upstream coffer dam</b>   | .. 215 feet |
| <b>Height of downstream coffer dam</b> | .. 135 feet |



*Bhakra Reservoir*

|  |  |
|--|--|
| Total storage capacity                                     | .. 7.4 million acre feet               |
| Live storage capacity                                      | .. 5.72 million acre feet              |
| Length of reservoir  | .. 56 miles                            |
| Area submerged   | .. 42,500 acres                        |
| Population to be displaced                                 | .. 30,000                              |
| No. of villages to be submerged or partly submerged        | .. 366                                 |
|  |  |
| Total quantity of excavation for dam and appurtenant works | .. 5.16 million cubic yard             |
| Total quantity of excavation for construction plant        | .. 2.25 million cubic yard             |
| Total quantity of concrete for Dam and appurtenant works   | .. 5.11 million cubic yard             |
| Cost of Dam  | .. Rs. 626.8 million                   |
| Cost of Bhakra-Nangal Project                              | .. Rs. 1,700 million.                  |
| No. of Units to be installed on full development           | .. Ten Units of 90,000 Killowatts each |
| Firm power on the whole Project                            | 400,000 Killowatts                     |

*Nangal Dam*

|                            |                            |
|----------------------------|----------------------------|
| Height                     | .. 95 feet                 |
| No. of bays                | .. 26 of 30 feet span each |
| Distance between abutments | .. 955 feet                |

*Power Houses at Nangal-Hydel Channel*

|  |   |
|--|---|
| No. of Power Houses                              | .. Two  |
| Head of each Power House                         | .. 98 feet                                      |
| No. of Units to be installed at each Power House | .. 2 units of 24,000 kW.<br>at each Power House |

*Nangal-Bhakra Canal System*

|                                  |                |
|----------------------------------|----------------|
| Length of Main Line and Branches | 690 miles      |
| Length of Distributaries         | .. 2,100 miles |

*Gross Area Commanded by the Project*

|   |                      |
|---|----------------------|
| New area to which irrigation will be given for the first time | .. 6.5 million acres |
| Old area where irrigation will be improved                    | .. 3.5 million acres |

|       |                                 |
|-------|---------------------------------|
| Total | <hr/> 10.00 million acres <hr/> |
|-------|---------------------------------|

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